FIG. 1

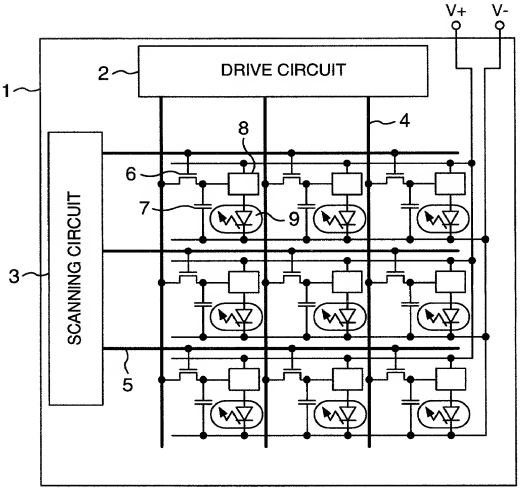
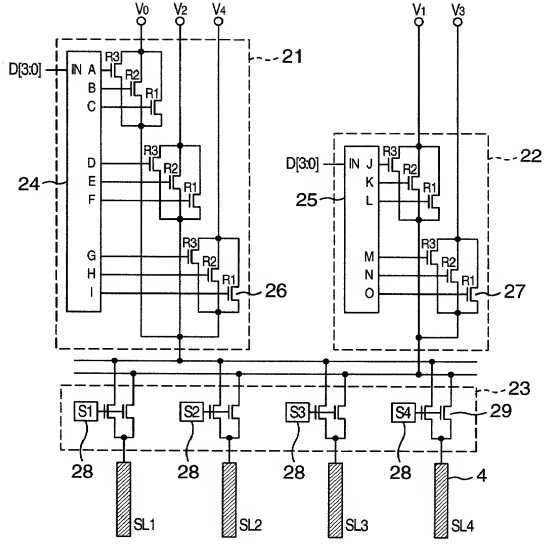


FIG. 2



21, 22 D/A CONVERSION CIRCUIT
23 SAMPLING CIRCUIT
24, 25, 28 CONTROL CIRCUIT
26, 27, 29 THIN-FILM TRANSISTOR
SL1 TO SL4 SIGNAL LINE

FIG. 3A

IN	A	B	C	D	E	F	G	H	I
0	1	1	1	0	0	0	0	0	0
1	0	0	1	0	0	0	0	0	0
2	0	1	0	0	0	0	0	0	0
3	1	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	1	1	0	0	0	0
6	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	1	0	0	0
8	0	0	0	1	1	1	0	0	0
9	0	0	0	0	0	1	0	0	0
10	0	0	0	0	0	0	0	0	0
11	0	0	0	1	1	0	0	0	0
12	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	1	0	0
14	0	0	0	0	0	0	0	1	0
15	0	0	0	0	0	0	0	0	1

FIG. 3B

IN	J	K	L	M	N	O
0	0	0	0	0	0	0
1	1	0	0	0	0	0
2	0	1	0	0	0	0
3	0	0	1	0	0	0
4	1	1	1	0	0	0
5	0	0	1	0	0	0
6	0	1	0	0	0	0
7	1	0	0	0	0	0
8	0	0	0	0	0	0
9	0	0	0	1	0	0
10	0	0	0	0	1	0
11	0	0	0	0	0	1
12	0	0	0	1	1	1
13	0	0	0	0	0	1
14	0	0	0	0	1	0
15	0	0	0	1	0	0

FIG. 4

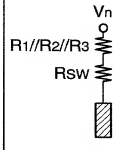
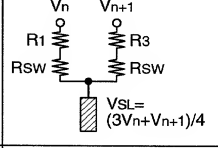
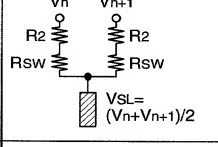
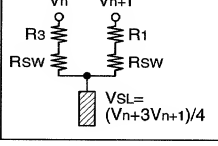
IN	GENERATION OF VSL
0	
1	
2	
3	

FIG. 5

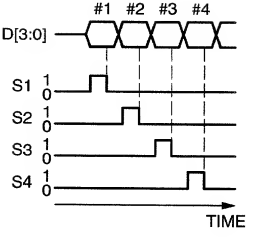


FIG. 6

D[3:0]	V_{SL}
0	V_0
1	$(3V_0+V_1)/4$
2	$(V_0+V_1)/2$
3	$(V_0+3V_1)/4$
4	V_1
5	$(3V_1+V_2)/4$
6	$(V_1+V_2)/2$
7	$(V_1+3V_2)/4$
8	V_2
9	$(3V_2+V_3)/4$
10	$(V_2+V_3)/2$
11	$(V_2+3V_3)/4$
12	V_3
13	$(3V_3+V_4)/4$
14	$(V_3+V_4)/2$
15	$(V_3+3V_4)/4$

FIG. 7

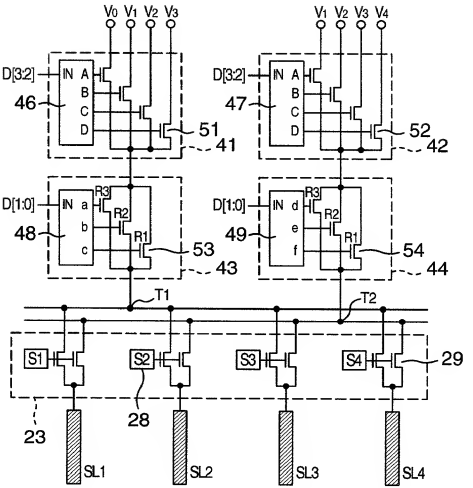


FIG. 8A

IN	A	B	C	D
0	1	0	0	0
1	0	1	0	0
2	0	0	1	0
3	0	0	0	1

FIG. 8B

IN	a	b	c
0	1	1	1
1	0	0	1
2	0	1	0
3	1	0	0

FIG. 8C

IN	d	e	f
0	0	0	0
1	1	0	0
2	0	1	0
3	0	0	1

FIG. 9

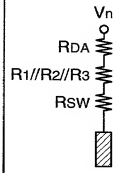
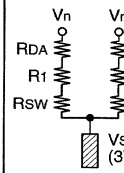
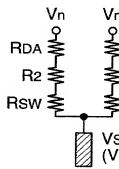
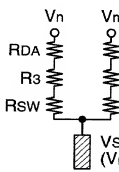
IN	GENERATION OF VSL
0	
1	
2	
3	

FIG. 10

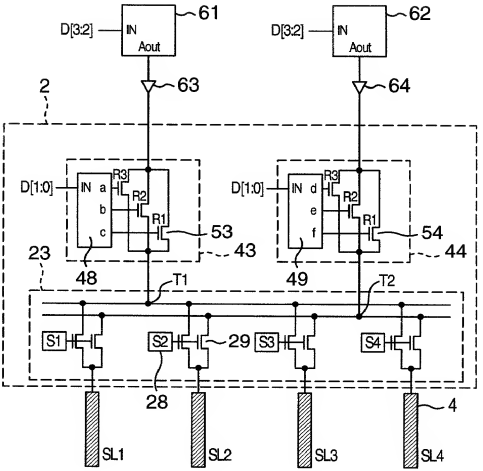


FIG. 11

IN	61 Aout	62 Aout
0	V0	V1
1	V1	V2
2	V2	V3
3	V3	V4

FIG. 12

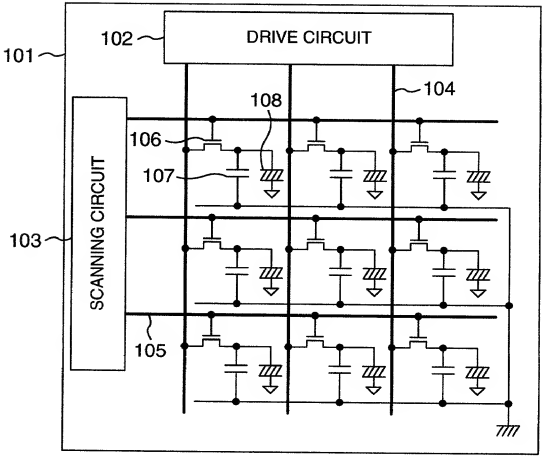

101
102
DRIVE CIRCUIT
104
108
106
107
103
SCANNING CIRCUIT
105

FIG. 13

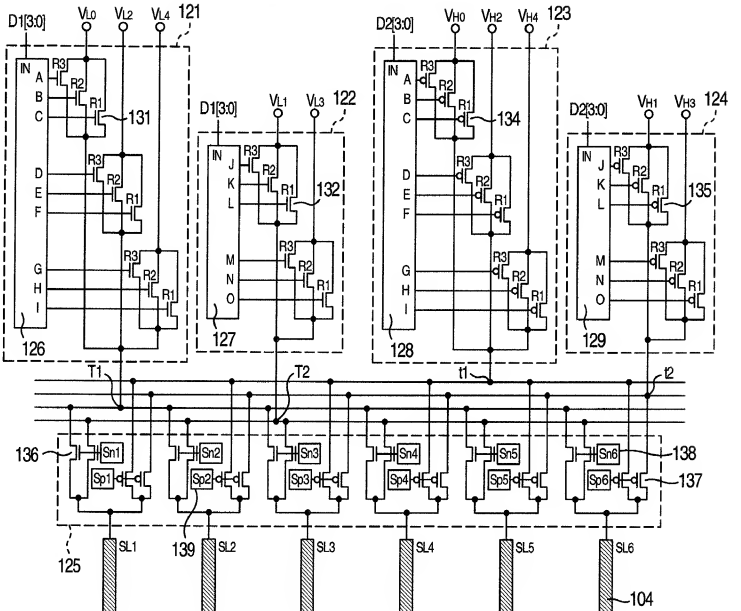


FIG. 14A

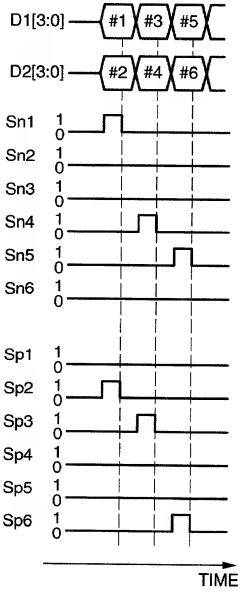


FIG. 14B

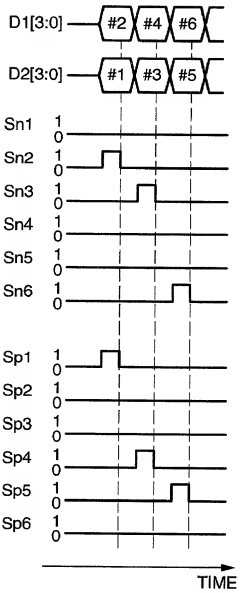


FIG. 15

D[3:0]	(a)	(b)
0	V_{H0}	V_{L0}
1	$(3V_{H0}+V_{H1})/4$	$(3V_{L0}+V_{L1})/4$
2	$(V_{H0}+V_{H1})/2$	$(V_{L0}+V_{L1})/2$
3	$(V_{H0}+3V_{H1})/4$	$(V_{L0}+3V_{L1})/4$
4	V_{H1}	V_{L1}
5	$(3V_{H1}+V_{H2})/4$	$(3V_{L1}+V_{L2})/4$
6	$(V_{H1}+V_{H2})/2$	$(V_{L1}+V_{L2})/2$
7	$(V_{H1}+3V_{H2})/4$	$(V_{L1}+3V_{L2})/4$
8	V_{H2}	V_{L2}
9	$(3V_{H2}+V_{H3})/4$	$(3V_{L2}+V_{L3})/4$
10	$(V_{H2}+V_{H3})/2$	$(V_{L2}+V_{L3})/2$
11	$(V_{H2}+3V_{H3})/4$	$(V_{L2}+3V_{L3})/4$
12	V_{H3}	V_{L3}
13	$(3V_{H3}+V_{H4})/4$	$(3V_{L3}+V_{L4})/4$
14	$(V_{H3}+V_{H4})/2$	$(V_{L3}+V_{L4})/2$
15	$(V_{H3}+3V_{H4})/4$	$(V_{L3}+3V_{L4})/4$

FIG. 18

IN	171About	172About	173About	174About
0	VL0	VL1	VH0	VH1
1	VL1	VL2	VH1	VH2
2	VL2	VL3	VH2	VH3
3	VL3	VL4	VH3	VH4

FIG. 16

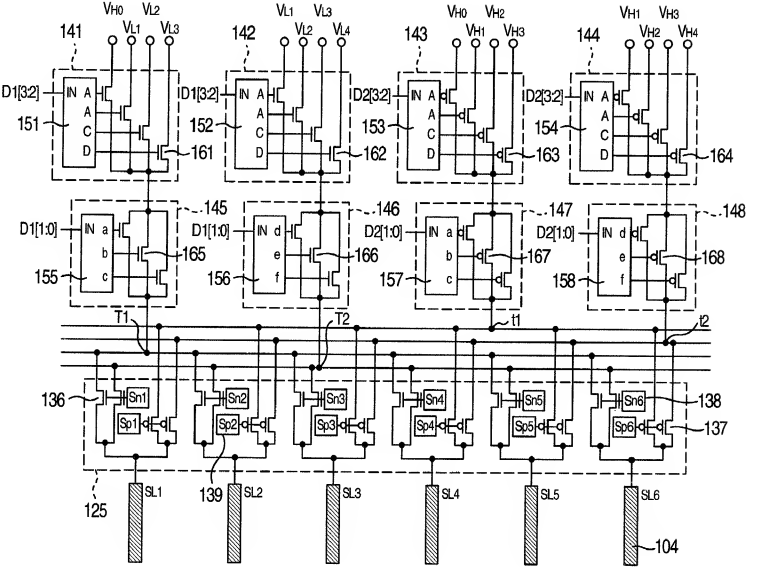


FIG. 17